

BUILDING A SCREAM MACHINE

ILLUSTRATION BY LARRY PRINTZ
TEXT BY ROSA SALTER
of *The Morning Call*

More than 150 steel fabricators, welders and other construction workers have spent nearly eight months constructing the \$10 million roller coaster Steel Force at Dorney Park in South Whitehall Township. Here's how they did it.

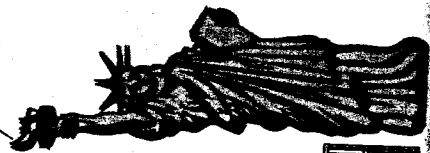
HOW TALL IS IT?

Steel Force
200 feet

Hercules
157 feet

ThunderHawk
65 feet

Statue of Liberty
151 feet



THE THREE-MINUTE MILE

The 5,600-foot-long Steel Force will take 3 minutes to ride. Passengers head northeast from, and return to, a station built on a former picnic grove at the park's southwest end.

Trains leave and return to an elevated station.

Second hill is 161 feet high. Riders will feel as if they weigh 30 percent of their body weight.

First drop is 205 feet, to 5 feet below ground level.

7 mph

50 mph

76 mph

51 mph

Two 125-foot-long parallel tunnels are 12 feet wide and drop 10 feet below ground level.

27.5 mph

43 mph

First of five camelback hills is 100 feet high.

53 mph

Here, riders feel as if they weigh 2.7 times their body weight.

60 mph

Double-decker spiral built on a hillside shoots riders between columns four times.

FACT

Did you know the weather can make a difference in how a roller coaster ride feels? If you want to go faster, choose a hot day to help overcome friction.



1) FOOTINGS

Soil borings were taken at about two dozen points

2) PIER CONSTRUCTION

FACT

